

WHAT IS CLAIMED IS:

1 1. For use in a code division multiple access communication system having a
2 source base station and a destination base station where a specified mobile station
3 establishes a connection with the source base station, a method comprising:
4 initiating a handover of the connection involving the specified mobile station to
5 the destination base station; and
6 establishing a start position of a synchronization search window for the specified
7 mobile station with reference to a perceived geographical location of the mobile station.

1 2. The method of claim 1, wherein the perceived geographical location is a
2 geographical coordinate position of the mobile station.

1 3. The method of claim 1, wherein the step of establishing the start position
2 involves determining a distance from the base station to the perceived geographical
3 location of the mobile station.

1 4. The method of claim 1, further comprising determining the perceived
2 geographical location of the mobile station at a radio network control node of a code
3 division multiple access communication system.

1 5. The method of claim 4, further comprising communicating the start time
2 position from the radio network controller node to the destination base station.

1 6. For use in a code division multiple access communication system having a
2 source base station and a destination base station where a specified mobile station
3 establishes a connection with the source base station, a method comprising:
4 initiating a handover of the connection involving the specified mobile station to
5 the destination base station; and
6 establishing a start position of a synchronization search window for the specified
7 mobile station with reference to a calculated distance of the mobile station from the
8 destination base station.

1 7. The method of claim 6, wherein the step of establishing the start position
2 includes calculating a distance from a geographical coordinate position of the mobile
3 station to a geographical coordinate position of the destination base station.

1 8. The method of claim 6, further comprising calculating the distance of the
2 mobile station from the destination base station at a radio network control node of a
3 code division multiple access communication system.

1 9. The method of claim 8, further comprising communicating the start time
2 position from the radio network controller node to the destination base station.

1 10. A telecommunications system comprising:
2 a source base station;
3 a destination base station having a synchronization searcher;
4 a synchronization start position determination unit which establishes a start
5 position of a synchronization search window for the synchronization searcher of the
6 destination station, the synchronization search window being used to detect a
7 transmission of a specified mobile station received at the destination base station during
8 a handover of a connection involving the specified mobile station from the source
9 station to the destination base station, the synchronization start position determination
10 unit establishing the start position of the synchronization search window with reference
11 to a perceived geographical location of the mobile station.

1 11. The apparatus of claim 10, wherein the perceived geographical location is a
2 geographical coordinate position of the mobile station.

1 12. The apparatus of claim 10, wherein the synchronization start position
2 determination unit establishes the start position ~~using~~ by calculating a distance from the
3 base station to the perceived geographical location of the mobile station.

1 13. A telecommunications system comprising:
2 a source base station;
3 a destination base station having a synchronization searcher;

4 a synchronization start position determination unit which establishes a start
5 position of a synchronization search window for the synchronization searcher of the
6 destination station, the synchronization search window being used to detect a
7 transmission of a specified mobile station received at the destination base station during
8 a handover of a connection involving the specified mobile station from a source base
9 station to the destination base station, the synchronization start position determination
10 unit establishing the start position of the synchronization search window with reference
11 to a calculated distance of the mobile station from the destination base station.

1 14. The apparatus of claim 13, wherein the synchronization start position
2 determination unit establishes the start position by calculating a distance from a
3 geographical coordinate position of the mobile station to a geographical coordinate
4 position of the destination base station.

1 15. The apparatus of claim 14, wherein the synchronization start position
2 determination unit calculates the distance of the mobile station from the destination base
3 station at a radio network control node of a code division multiple access
4 communication system.

1 16. The apparatus of claim 15, wherein the radio network controller node
2 communicates the start time position to the destination base station.

1 17. A synchronization start position determination unit situated at a node of code
2 division multiple access communication system comprising, the synchronization start
3 position determination unit serving to establish a start position of a synchronization
4 search window for a synchronization searcher of a destination base station, the
5 synchronization search window being used to detect a transmission of a specified
6 mobile station received at the destination base station during a handover of a connection
7 involving the specified mobile station from a source base station to the destination base
8 station, the synchronization start position determination unit establishing the start
9 position of the synchronization search window with reference to a perceived
10 geographical location of the mobile station.

1 18. The apparatus of claim 17, wherein the perceived geographical location is a
2 geographical coordinate position of the mobile station.

1 19. The apparatus of claim 17, wherein the synchronization start position
2 determination unit establishes the start position ~~using~~ by calculating a distance from the
3 base station to the perceived geographical location of the mobile station.

1 20. A synchronization start position determination unit situated at a node of code
2 division multiple access communication system comprising, the synchronization start
3 position determination unit serving to establish a start position of a synchronization
4 search window for a synchronization searcher of a destination base station, the
5 synchronization search window being used to detect a transmission of a specified
6 mobile station received at the destination base station during a handover of a connection
7 involving the specified mobile station from a source base station to the destination base
8 station, the synchronization start position determination unit establishing the start
9 position of the synchronization search window with reference to a calculated distance of
10 the mobile station from the destination base station.

1 21. The apparatus of claim 20, wherein the synchronization start position
2 determination unit establishes the start position by calculating a distance from a
3 geographical coordinate position of the mobile station to a geographical coordinate
4 position of the destination base station.

1 22. The apparatus of claim 20, wherein the synchronization start position
2 determination unit calculates the distance of the mobile station from the destination base
3 station at a radio network control node of a code division multiple access
4 communication system.

1 23. The apparatus of claim 22, wherein the radio network controller node
2 communicates the start time position to the destination base station.